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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/522,519 | 02/28/2005 | Kyoko Yokoi | TIP-05-1007 | 1423 |
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| EXAMINER | | | | |
| CHRISS, JENNIFER A | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1794 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,519

Applicant(s)

YOKOI ET AL.

Examiner

JENNIFER A. CHRISS

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's Amendments and Accompanying Remarks filed on February 5, 2009 has been entered and carefully considered. Claims 5 and 7 are amended and claims 5 – 8 are pending. In view of Applicant's amendment to claims 5 and 7 requiring that the polyurethane is mixed with predetermined amounts and colors of at least one each of yellow, red and blue pigments, the Examiner withdraws all previously set forth rejections. However, after an updated search, additional art has been found which renders the invention as currently claimed unpatentable for reasons herein below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Civardi et al. (US 3,716,397) in view of Fukushima (US 4,046,504) and Streicher et al. (US 4,983,185).

Civardi et al. is directed to a microporous elastomeric sheet material suitable for

making shoe uppers (Abstract), in particular a leather substitute (column 6, lines 60 – 65).

As to claims 1 and 7, Civardi et al. teach a poly-urethane impregnated non-woven felted batt or fibers of polyester (column 6, lines 60 – 68). Civardi et al. teach that the polyurethane is a pigmented latex which is a blend of a dispersed pigment with an aqueous emulsion of a polymer (column 2, lines 15 - 20). Civardi et al. note that the sheet has improved color uniformity through the thickness and area of the sheet (column 2, lines 30 - 35).

Civardi et al. fail to teach that the polyester fibers are ultra-fine fibers having a fineness of 0.7 dtex or less.

Fukushima is directed to a suede sheet material having desirable tactile properties and good coloring (Abstract). Fukushima teaches a suede sheet material comprising a fibrous mat and a binder (column 2, lines 50 - 60). Fukushima teaches that the fibrous mat is impregnated with a binder containing an elastomer and then the fibers are raised on the surface of the resulting sheet by buffing or brushing to create the napped surface (column 3, lines 65 – 69 and column 4, lines 1 – 5). Fukushima note that the fibers of the suede sheet have a size of less than 0.1 denier (0.11 dtex) (column 4, lines 30 – 40) and that ultra-fine fibers exhibit excellent tactile properties (column 1, lines 40 - 48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use ultra-fine fibers, specifically ones with a fineness of less than 0.1 denier, as suggested by Fukushima in the felted batt of Civardi et al. motivated by

the desire to create a leather substitute having excellent tactile properties.

Civardi et al. in view of Fukushima teaches the claimed invention above but fails to specifically teach that the polyurethane contains at least one each of yellow, red and blue pigments selected from the group consisting of diketopyrrolopyrrole, anthraquinone, perylene, perynone, quinacridone, azo, polyazo, condensed azo, imidazolone, phthalocyanine, isoindoline, indigo, thioindigo, azomethine-azo, dioxazine, indanthrone, flavanthrone and pyranthrone.

Streicher et al. is directed to dyeing of leather with pigments (Title). Streicher et al. note that the pigments create a leather with good lightfastness (column 1, lines 10 – 20). Streicher et al. teach that the leather can be treated with individual pigments but also with mixtures of pigments. Preferably, the leather is dyed with a mixture of yellow, red and blue pigments, which gives rise to brown shades (column 5, lines 64 - 69). Streicher et al. note that the process makes it possible to obtain leather which has excellent levelness, depth of shade, brilliance and high lightfastness, wetfastness and migration fastness properties (column 6, lines 1 - 5). Streicher et al. note that the pigments may be selected from various pigments such as mono-azo pigments, anthraquinone pigments, thioindigo pigments, azomethine-azo pigments, quinacridone pigments and dioxazine pigments (column 2, lines 60 - 69 and column 3, lines 1 - 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pigment blend of yellow, red and blue pigments selected from mono-azo pigments, anthraquinone pigments, thioindigo pigments, azomethine-

azo pigments, quinacridone pigments and dioxazine pigments motivated by the desire to create a suede sheet material having a natural brown color.

Civardi et al. in view of Fukushima and Streicher et al. teach the claimed invention above but fails to teach that the infrared reflectance is 850 nm at 60% or more, the surface temperature during light irradiation is 105 C or lower, light fastness is class 3 or better, the discoloration ratio after reduction cleaning is 20% or less and the chroma is 10 or less. It is reasonable to presume that the above discussed properties are inherent to Civardi et al. in view of Fukushima and Streicher et al. Support for said presumption is found in the use of like materials (i.e. an artificial leather containing fibers of a similar linear density range impregnated with a polyurethane binder which is colored with red, blue and yellow pigments selected from the pigments of claims 5 and 7) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties would obviously have been present once the Civardi et al. in view of Fukushima and Streicher et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

4. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Civardi et al. (US 3,716,397) in view of Fukushima (US 4,046,504) and Streicher et al. (US 4,983,185) as applied above, and further in view of Pedain et al. (US 3,867,350).

Civardi et al. in view of Fukushima and Streicher et al. teach the claimed invention above but is silent to the use of a polycarbonate-based polyurethane.

Pedain et al. relates to polyurethane urea elastomers based on polycarbonate macrodiols which have the advantage of being less of a physiological hazard, that are more resistant to common solvents and require less emulsifiers and dispersion aids (Title and Abstract). The reference teaches the use of the resin for the production of coatings applied to substrates such as leather and artificial leather (column 6, lines 20-31).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the resin of Civardi et al. in view of Fukushima and Streicher et al. and provide it with the polycarbonate based polyurethane of Pedain et al. with the motivation of using an elastomer that is less of a physiological hazard, that is more resistant to common solvents and require less emulsifiers and dispersion aid as disclosed by Pedain et al. (Abstract).

Response to Arguments

5. Applicant's arguments with respect to claims 5 – 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. CHRISS whose telephone number is

(571)272-7783. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 6 p.m., first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A Chriss/
Primary Examiner, Art Unit 1794

/J. A. C./
Primary Examiner, Art Unit 1794